

What is claimed is:

1. Yeast expression vector pPIC-rBAT comprising recombinant thrombin-like enzyme.

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2. The expression vector according to claim 1, wherein the recombinant thrombin-like enzyme is batroxobin protein listed in Sequence NO: 1.

3. Yeast (*Pichia pastoris*) GS115 transformed with the expression vector pPIC-rBAT of claim 1.

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4. Preparation method of thrombin-like enzyme, comprising culture and fermentation of the transformed microorganism of claim 3 and process to obtain recombinant thrombin-like enzyme therefrom.

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5. The preparation method according to claim 4, wherein the method is to incubate the transformed microorganism in the medium of pH 5.0-7.0 at 20-40°C for 12-14 hours and then incubate the cells obtained by centrifugation of culture in the medium of pH 5.0-7.0 containing 0.5-1.5%(v/v) methanol at 20-40°C for 72-120 hours.

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6. Preparation method of recombinant thrombin-like enzyme, comprising

a) step to obtain active fraction of recombinant thrombin-like enzyme from the expressed culture of claim 4 or claim 5 by using hydrophobic chromatography; and

b) step to purify recombinant thrombin-like enzyme by applying the active fraction to affinity chromatography.